Proposed Adoption of the 2009 Edition of The International Fire Code

Plan Submittals

105.4 Construction documents. *Construction documents shall be in accordance with this section and in accordance with the guidance in the City's "Fire Protection Criteria Manual".*

105.4.1 Submittals. *Construction documents and supporting data that are part of site plan or building permit submittals shall be submitted in accordance with the requirements of the City of Austin Land Development Code. Shop drawing submittals subsequent to building permit review shall be submitted directly to the fire department in two or more sets ~~with each application for a permit and~~ in such form and detail as required by the fire ~~code official~~chief. The construction documents shall be prepared by a registered design professional, licensed fire alarm planner (APL), or licensed fire sprinkler responsible managing employee (RME) as appropriate and as ~~where~~ required by the statutes of the ~~jurisdiction in which the project is to be constructed~~State of Texas.*

Exception: *The fire ~~code official~~chief is authorized to waive the submission of construction documents and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.*

Plan Submittals

105.4.1.1 Examination of documents. *The fire ~~code official~~ chief shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the work indicated and described is in accordance with the requirements of this code.*

105.4.2 Information on construction documents. *Construction documents shall be drawn to scale upon suitable material on in a media acceptable to the City of Austin Watershed Protection and Development Review Department and the Austin Fire Department. All shop drawings submitted to the Fire Department that are drawn to any scale other than ⅛"=1' or ¼"=1' shall be assessed the fee set for non-standard drawing scales. ~~Electronic media documents are allowed to be submitted when approved by the fire code official.~~ Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that ~~it~~ the work will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the fire code official.*

Permits

105.6.35. Private fire hydrants. An annual operational permit is required for all properties served by private fire hydrants. Notification of the fire department is required for the removal from service, use or operation of private fire hydrants. This permit requirement shall become effective at midnight on January 1, 2011.

Permits

105.6.43 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of *100 square feet (9.3 m²), or an aggregate area of multiple tents or membrane structures placed side by side in excess of 400 square feet (37m²).*

Exceptions:

1. *Tents* used exclusively for recreational camping purposes.
2. *Tents that are not attached to, or located within 20 feet (6096 mm) of, a building shall not require a permit unless the tent is in excess of 400 square feet (37 m²).*
3. *Tents* open on all sides which comply with all of the following:
   - ~~2~~3.1 Individual *tents* having a maximum size of 700 square feet (65 m²).
   - ~~2~~3.2 The aggregate area of multiple *tents* placed side by side without a firebreak clearance of not less than *12* feet (*3658mm*) shall not exceed 700 square feet (65 m²) total.
   - ~~2~~3.3 A minimum clearance of 20 feet (6096 mm) to structures and other *tents* shall be provided.
4. *Inflatable playground equipment at one- or two- family residences.*
5. *Inflatable playground equipment used for less than 24 hours at places of worship or education facilities (for ages served by the 6th grade and younger) when located a minimum of 20 feet from the nearest building.*

Permits

105.6.48 Fire protection systems permit. *An annual operational permit is required for all fixed fire protection systems in buildings and facilities, including but not limited to fire alarm systems, fire sprinkler systems, commercial kitchen hood suppression systems, and smoke control systems. A single permit shall be issued to each building or facility detailing the types and locations of systems present. Inspections and testing in accordance with the City of Austin Fire Protection Criteria Manual and/or applicable national standards shall be a condition of permit approval. This section shall become effective at midnight on January 1, 2011. See 105.6.35 concerning permit requirements for private hydrant systems.*

Permits

105.7 Required construction permits. *The fire code official is authorized to issue construction permits for work as set forth in Section~~s~~ 105.7.1 ~~through 105.7.13~~.*

105.7.1~~4~~ Temporary membrane structures and tents. *A construction permit is required to erect an air supported temporary membrane structure or tent having an area in excess of 100 square feet (9.3 m^2) or an aggregate area of multiple tents placed side by side in excess of 400 square feet (37 m^2).*

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains or extensions attached thereto, when used for funeral services.
3. Tents that are not attached in any way to or within 20 feet (6096 mm) of a building shall not require a permit unless the tent is in excess of 400 square feet (37 m^2).
4. Tents open on all sides, which comply with all of the following:
4.1 Individual tents having a maximum size of 700 square feet (65 m^2)
4.2 The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m^2) total.
4.3 A minimum clearance of ~~12~~ 20 feet (~~3658 mm~~ 6096 mm) to structures and other tents shall be provided.
5. Inflatable playground equipment at one- or two- family residences.
6. Inflatable playground equipment used for less than 24 hours at places of worship or education facilities (for ages served by the 6th grade and younger) when located a minimum of 20 feet from the nearest building.

Reinspections

106.2.3 Reinspections. When previously identified violations have not been corrected, a fee shall be assessed for a construction related reinspection requested by the applicant or contractor. *When a scheduled inspection fails, or is cancelled with less than a 24 hour notice, due to the fact that the applicant or contractor was not capable of or prepared for the inspection to be conducted, a reinspection fee shall be assessed.* The reinspection fee shall be in an amount set by a separate ordinance. No subsequent inspections shall be made until the required fees have been paid and required documentation submitted.

I Occupancies

GROUP I-1. This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Group homes
Half-way houses
Residential board and care facilities
Social rehabilitation facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 in accordance with this code ~~or shall comply with the International Residential Code in accordance with Section 101.2 of the International Building Code~~. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.

Residential Occupancies

Residential Group R. *Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code in accordance with Section 101.2 (Scope). Residential occupancies shall include the following:*

R-1 *Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:*

- *Boarding houses (transient)*
- *Hotels (transient)*
- *Motels (transient)*
- *Bed and Breakfasts*

Congregate living facilities (transient) with 10 or fewer occupants are permitted as an alternate method of compliance to comply with the construction requirements for Group R-3 including Section 903.2.8 (Group R).

Residential Occupancies

R-2 *Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:*

- *Apartment houses*
- *Boarding houses (not transient)*
- *Convents*
- *Dormitories*
- *Fraternities and sororities*
- *Hotels (nontransient)*
- *Monasteries*
- *Motels (nontransient)*
- *Vacation timeshare properties*

Congregate living facilities with 16 or fewer occupants are permitted as an alternate method of compliance to comply with the construction requirements for Group R-3 including Section 903.2.8 (Group R).

Residential Uses

R-3 *Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:*

Buildings that do not contain more than two dwelling units.
Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
Congregate living facilities with 16 or fewer persons.

Adult care and child care facilities that are within a single-family home are permitted as an alternate method of compliance to comply with the International Residential Code provided the building is protected by an automatic sprinkler system in accordance with Section 903.2.8 (Group R).

Exception: *Compliance with Section 903.2.8 (Group R) is not required for adult care and child care facilities that are within the proprietor's single-family home provided that the home was constructed and occupied as a residence prior to the adoption of this code.*

Residential Uses

R-4 *Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.*

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code, or, as an alternate method of compliance, shall comply with the International Residential Code provided the building is protected by an automatic sprinkler system installed in accordance with 903.2.8 (Group R).

Unsafe Conditions

311.5 Placards. *Any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards shall be marked as required by Sections 311.5.1 through 311.~~5.5~~6.*

311.6 Placards for hazards related to emergency response. *Any building or structure that is determined to present unique hazards to firefighters during emergency operations shall be protected or marked as required by Section 505.3 of this code.*

Unsafe Conditions

311.6 Placards for hazards related to emergency response. *Any building or structure that is determined to present unique hazards to firefighters during emergency operations shall be protected or marked as required by Section 505.3 of this code.*

316.6 Unprotected Construction Presenting Hazards To Firefighters. *Structures, regardless of occupancy, employing construction methods or materials that have been shown by experience or testing to be associated with early failure or failure with little or no warning under fire exposure shall be identified as potentially hazardous to responding firefighters by the premises identification in accordance with section 505.3.*

Exceptions: *1. Buildings protected throughout by automatic fire sprinklers in accordance with 903.3.1.1, 903.3.1.2 or 903.3.1.3.*

2. Buildings with a noncombustible or limited combustible membrane that shields the floor or roof construction materials from fire exposure. Such membranes may be constructed using gypsum wallboard of at least ½" nominal thickness, cementous fiberboard of at least ¼"nominal thickness, or fire retardant treated wood (FRTW) of at least ½" nominal thickness.

Unsafe Conditions

316.6.1 Unprotected Construction Presenting Hazards To Firefighters in Existing Buildings. *When existing buildings, including residential structures, are identified as employing construction methods or materials that have been shown by experience or testing to be associated with early failure or failure with little or no warning under fire exposure, the premises identification markings shall be revised to achieve compliance with section 505.3*

Exceptions: *1. Buildings protected throughout by automatic fire sprinklers in accordance with 903.3.1.1, 903.3.1.2 or 903.3.1.3.*

2. Buildings with a noncombustible or limited combustible membrane that shields the floor or roof construction materials from fire exposure. Such membranes may be constructed using gypsum wallboard of at least ½" nominal thickness, cementous fiberboard of at least ¼" nominal thickness, or fire retardant treated wood (FRTW) of at least ½" nominal thickness.

Unsafe Conditions

505.3 Premise Hazard Identification Signs. *Structures that the Chief deems to have the potential to present an unusual level of hazard to firefighters during fire ground operations shall be identified such that it is readily identifiable to responding fire department personnel. Such structures may or may not present obvious dangers to the occupants of the building when no fire is present. Potentially hazardous structures may be identified as prescribed by this code, by the building code, or by fire department safety policies and procedures.*

505.3.1 Hazardous Address Numbering. *Structures that are required to be readily identifiable by responding fire department personnel shall have unique address numbering signs. The signs shall be installed on all sides of the building facing emergency vehicle access established in accordance with section 503 or facing an approach directly from public rights-of-way. Signs will consist of the address numbers of the building in* ***4-inch tall white letters on a solid red background.*** *The address numbers will be oriented vertically. The signage will be reflective to be visible at night, weather resistant and permanent.*

Radio Communications

510.1 Emergency responder radio coverage in buildings. *All buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communications system of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication system.*

Exceptions:

*1. Where approved by the building official and the fire chief, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained in lieu of an approved radio coverage system in buildings where a floor for human occupancy is **not** located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.*

2. Where it is determined by the fire code official that the radio coverage system is not needed.

Radio Communications

510.1.1 Time Frame for New Building Installations. *The adequacy of radio coverage for buildings permitted after adoption of this code shall be determined following completion of construction and issuance of the Certificate of Occupancy. If supplemental equipment such as bi-directional amplifiers are necessary to assure radio coverage, the design and installation of the supplementary radio transmission equipment shall be completed within two (2) years of original occupancy.*

510.1.2 Time Frame for Existing Buildings. *If it is discovered that radio coverage is not adequate within buildings permitted prior to the adoption of this code the design and installation of necessary supplementary radio transmission equipment shall be completed within three (3) years of the discovery of the deficiency.*

Commercial Cooking

See Also Amendments to 904.11

[M] COMMERCIAL COOKING APPLIANCES. Appliances used in a commercial food service establishment for heating or cooking food and which produce grease vapors, steam, fumes, smoke or odors that are required to be removed through a local exhaust ventilation system. Such appliances include deep fat fryers; upright broilers; griddles; broilers; steam-jacketed kettles; hot-top ranges; under-fired broilers (charbroilers); ovens; barbecues; rotisseries; and similar appliances. For the purpose of this definition, a food service establishment shall include any building or a portion thereof used for the preparation and serving of food for more than 6 hours per week, including food services within a residential board and care facility if the facility serves 12 or more residents.

Fuel Oil And Generators

603.3.2 Fuel oil storage inside buildings. *Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.~~5~~ 4 and~~or~~ Chapter 34.*

603.3.2.1 Quantity limits. *One or more fuel storage tanks containing Class II or III combustible liquids shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L) when the tanks are in a room protected with a 1-hr fire barrier wall and the building is protected by an automatic sprinkler system.*

Exception: *The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11 356 L) of Class II or III liquid for storage in protected aboveground tanks complying with Section 3404.2.9.6, when the following conditions are met:*

1. *The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;*
2. *The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;*
3. *The tanks shall be located in a building~~room~~ protected by an automatic sprinkler system complying with 903.3.1.1; and*
4. *The room containing the tank or tanks is built as a Group H Occupancy except that ventilation in accordance with 2704.3 will not be required.*

Fuel Oil and Generators

603.3.2.2 Restricted use and connection. *Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel to fuel-burning or generator equipment installed in accordance with Section 603.3.2.43. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.*

603.3.2.43 Installation. *Tanks and piping systems shall be installed and separated from other uses in accordance with Section 915 and Chapter 13 both of the International Mechanical Code, as applicable.*

~~***Exception:*** *Protected above ground tanks complying with Section 3404.2.9.6 shall not be required to be separated from surrounding areas.*~~

603.3.2.54 Tanks in basements. *Tanks in basements shall be located not more than* ~~*two stories*~~*one story below the grade plane.*

Flex Sprinkler Piping

903.3.8 Sprinkler System Flex Piping. *Flex piping used in automatic sprinkler systems shall be limited in length to a maximum of 6 feet. The extinguishing agent shall pass through a maximum of one 6 foot section before discharging from the sprinkler orifice (head). Approval of shop drawing submittals shall be required for all uses of flex sprinkler piping and where more than one (1) flex piping sprinkler drop is used in a remodel application the adequacy of the water supply shall be verified by hydraulic calculations.*

Fire Extinguishers

906.1 Where required. Portable fire extinguishers shall be installed in the following locations.

Before the installation of Halon fire extinguishers in new occupancies or processes, the applicant must submit a demonstration of need acceptable to the Chief detailing a critical need for this type of extinguisher such as a direct effect on life safety that cannot be adequately addressed by other types of extinguishing agents.

1. In all Group A, B, E, F, H, I , M, R-1, R-2, R-4 and S occupancies.

Exception: *In all Group A, ~~B~~ and E occupancies equipped throughout with quick- response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.*

2. Within 30 feet (9144 mm) of commercial cooking equipment.
3. In areas where flammable or combustible liquids are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 1415.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire ~~code official~~chief.

Fire Alarms

907.2 Where required—new buildings and structures. *An approved manual, automatic or manual and automatic fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.6, unless other requirements are provided by another section of this code.*

A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

1. ~~1.~~*The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.*
2. ~~2.~~*The manual fire alarm box is* ~~*not required for Group R-2 occupancies unless*~~ *required* ~~*by the fire code official*~~ *to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event.* ~~*Where provided, the*~~ *The manual fire alarm box* ~~*shall not*~~*may be located in an area that is accessible to the public.*

Fire Alarms

Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.

The automatic fire detectors shall be smoke detectors. Where ambient conditions prohibit installation of automatic smoke detection, other automatic fire detection shall be allowed.

The fire alarm control panel or a full function remote annunciator shall be installed at the main entrance for use by fire department personnel.

Fire Alarms & Day Cares

907.2.6.4 Common Areas Within Day Care Occupancies. ~~*Except when housed in a single room, d*~~Day care occupancies shall be protected by a *fire alarm system which monitors smoke detectors*~~*sion*~~ *installed in accordance with this section, the listing of the detectors* ~~*system in accordance with this Code and associated standards*~~ *NFPA 72*. Detectors must be placed on each story in front of doors to the stairways and at no greater spacing than the detector's listed spacing in the corridors of all floors containing the day care facility. Detectors must also be installed in lounges, recreation areas and sleeping rooms in the day care occupancy and as required by the Building Code. Alarms shall be visible and audible throughout the day care facility.

Fire Alarms & Day Cares

Exceptions:

1. *Day cares housed within a single room.*
2. ~~An E 3 occupancy~~A Group E day care housed within and serving the students of an E ~~1, or E 2~~ occupancy, such as an after school program, summer program, or similar function, are permitted to comply with the alarm and detection requirements of ~~the E 1 or E 2 occupancy it is housed within~~section 907.2.3.
3. *Day cares serving less than 12 children when operated within the single family residence of the day care operator, provided that the dwelling is protected with interconnected hard wired smoke alarms located as required by this section and powered as required for a new home in accordance with the International Residential Code and NFPA 72. When such residential day cares serve hearing impaired children, parents, or guardians, the interconnected single station smoke alarms shall be listed for visual alarm service.*
4. *Single story day care occupancies serving 30 or fewer children with multiple remote at grade exits as defined by the Building Code may be provided with a smoke detection system complying with the State of Texas licensing standards provided that the operation of any detection device will cause the operation of an alarm device within every area listed above. When such small day cares serve hearing impaired children, parents, or guardians, the alarm signals shall be produced by devices listed for visual alarm service.*

Duct Detectors

907.2.7 Group M. A manual fire alarm system shall be installed in Group M occupancies having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge. The initiation of a signal from a manual fire alarm box shall initiate alarm notification appliances as required by Section 907.10.

Exceptions:

1. A manual fire alarm system is required in covered mall buildings complying with Section 402 of the International Building Code.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will automatically activate upon sprinkler water flow.
3. *Duct smoke detectors installed in separate lease spaces of large shell buildings need not be connected to monitoring panels where the only fire alarm system installed in the building is the required monitoring for a fire sprinkler system and the sprinkler monitoring system is located inside a different lease space.*

Alarm Signals On Residential Balconies

907.2.8.1 Manual fire alarm system. A manual fire alarm system shall be installed in Group R-1 occupancies.

Exceptions:

1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, exit court or yard.
2. Manual fire alarm boxes are not required throughout the building when the following conditions are met:
   - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
   - 2.2. The notification appliances will activate upon sprinkler water flow; and
   - 2.3. At least one manual fire alarm box is installed at an approved location.
3. *Audibility requirements shall not be applicable on balconies less than 100 square feet in area, or on balconies where the least dimension is less than 5' (wide balconies).*

Smoke Detection in R-1 Uses

907.2.8.2 Automatic smoke detection system. An automatic *smoke* detection system *that activates the occupant notification system in accordance with Section 907.6* shall be installed throughout all group R-1 occupancies. Listed system-type automatic detector shall be installed within ~~common areas such as~~ interior corridors serving *sleeping units* and within common areas such as, recreational rooms, laundry rooms, furnace rooms, and similar areas served by such interior corridors providing access to and egress from sleeping units ~~within the same building containing sleeping units~~.

Exception: An automatic *smoke* detection system is not required in buildings that do not have interior corridors serving *sleeping units*, ~~and~~ where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit, and where recreational rooms, laundry rooms, furnace rooms, and similar areas are not located within the same building with *sleeping units*.

Multi-Family Fire Alarms

907.2.9 Group R-2. *Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Section 907.2.9.1 and 907.2.9.2.*

907.2.9.1 Manual and automatic fire alarm system. A manual and automatic fire alarm system *that activates the occupant notification system in accordance with 907.6* shall be installed in Group R-2 occupancies where:

1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or
3. The building contains more than 16 dwelling units or sleeping units.

Listed system-type automatic detectors shall be installed within common areas such as recreational rooms, laundry rooms, furnace rooms, *interior corridors serving as the primary access and egress for dwelling units,* and similar areas.

Multi-Family Fire Alarms

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.
2. Manual fire alarm boxes are not required throughout the building ~~where~~ when all the following conditions are met:
   - 2.1. ~~the~~ The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or Section 903.3.1.2 ~~and~~;
   - 2.2. ~~the~~ The notification appliances will *automatically* activate *throughout the notification zones* upon sprinkler *water* flow; and
   - 2.3. At least one manual fire alarm box is installed at an approved location.
3. A separate fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with 903.3.1.1 or 903.3.1.2, provided that sprinkler system activation results in a local alarm designed to notify all occupants and~~,~~ ~~provided that~~ dwelling units have a means of egress door opening directly to an exterior exit access that leads directly to the exists or are served by open ended corridors designed in accordance with Section 1026.6, exception 4.
4. *Audibility requirements shall not be applicable on balconies less than 100 square feet in area,* ***or*** *on balconies where the least dimension is 5' or less (narrow balconies).*

907.2.9.2 Smoke alarms. *Single- and multiple-station smoke alarms shall be installed in accordance with section 907.2.11.*

Emergency Communications

907.2.13.2 Fire department wired communications system. *An approved two-way, fire department wired communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 508 and elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication device shall be provided at each floor level within the enclosed exit stairway.*

FACP & Power Supply Protection

907.5.1 Protection of fire alarm control unit. *In areas that are not continuously occupied, a single smoke detector shall be provided at the location of each fire alarm control unit, notification appliance circuit power extenders, and supervising station transmitting equipment.*

Exceptions:

1. Where ambient conditions prohibit installation of automatic smoke detection, a heat detector shall be permitted.

2. The smoke detector shall not be required at the location of notification appliance circuit power extenders where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Visual Appliances In Multi-Family Residential Occupancies

907.6.2.3.4 ~~***907.10.1.4***~~ **Group R-2**. In Group R-2 occupancies required by Section 907 to have a fire alarm system, *alarm signals shall be audible throughout the dwelling units and sleeping units, including on exterior balconies where the area of the balcony exceeds 100 sq ft or the least dimension of the balcony exceeds 5 feet*~~, all~~. ~~d~~*D*welling units and sleeping units shall be provided with *visible alarm notification appliances or* the capability to support *such*~~visible alarm notification~~ appliances in accordance with ICC A117.1 as required by Federal and State laws and regulations.

Fire Alarm Annunciation, Monitoring & Control

907.7.5 ~~***907.15***~~ **Monitoring.** Fire alarm systems required by this chapter or by the International Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, or by a local alarm which gives audible and visual signals at a constantly attended location. *Reporting procedures and personnel training records for local alarm systems monitored at a constantly attended location shall be maintained for review and approval by the Fire Department.*

Exception: Supervisory service is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.*11*.
2. ~~Smoke detectors in Group I-3 occupancies.~~
3. ~~3~~2. Automatic sprinkler systems in one- and two-family dwellings.

907.7.6 Annunciation and control. *The main fire alarm control panel or an full function remote annunciator shall be install at the main entrance or at an approved location near the main entrance of buildings with fire alarm systems.*

Fire Department Connections

912.1.1 Number of Hose Connections. Fire department connections (FDC's) shall include a minimum of two (2) 2½ inch (63.5 mm) female National Standard Hose Thread (NST) inlet connections. Where system design flow rates exceed 500 gpm (1,893 lpm), a minimum of one FDC inlet connection shall be installed for each 250 gpm (946 lpm) or portion thereof.

Exception: Where permitted by other sections of this code or associated standards, a single *1½ inch or 2½ inch* FDC inlet is acceptable for residential fire sprinkler systems installed in accordance with NFPA *13R*. When an FDC is installed, a single 1½ inch inlet is acceptable for residential system installed in accordance with NFPA 13D.

Fire Department Connections

912.3 Access. Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other *fixed or moveable* object for a minimum of 3 feet (914 mm). Access to fire department connections shall be approved by the fire chief.

Exception: *Fences, where provided with an access gate equipped with a sign complying with the legend requirements of Section 912.4 and a means of emergency operation. Locks, if installed shall be openable by use of a fire department Knox Key. The gate and means of emergency operation shall be approved by the fire chief and maintained operational at all times.*

912.3.1 Locking fire department connection caps. *The fire code official is authorized to require locking caps on fire department connections for water-based fire protection systems. The locking caps shall be manufactured by an approved manufacturer and used and maintained as designed.* ~~*where the responding fire department carries appropriate key wrenches for removal.*~~

FDCs For Existing Buildings

912.3.1.2 Locking fire department connection caps in existing buildings or structures. *The fire code official is authorized to require locking caps on fire department connections (FDC) for water-based fire protection systems serving existing buildings where the fire department has observed obstructions placed in the FDC or where the FDC is missing caps. The locking caps shall be manufactured by an approved manufacturer and used and maintained as designed.*

912.4.1 Fire Department Connection Placard – for existing structures. *In addition to the signage required in 912.4, an all weather, permanent, system placard shall be placed in a visible location adjacent to the fire department connection on all structures over 10 floors in height and/or structures with a fire department connection requiring pressures exceeding 150psi. The placard text shall be white reflective letters, 1 ½ inch minimum height, on either a red or black background. The placard shall contain the following information.*

1. *Required system pressure at FDC inlet.*
2. *Area of building served by FDC*
3. *System PRV locations*

Stairway Communications

[B 403.5.3.1] 914.3.7 Stairway communications system. *A telephone or other two-way communications system connected to an approved constantly attended station shall be provided at not less than every ~~fifth~~ floor in each required stairway where the doors to the stairway are locked.*

Exception: *The stairway communication system is not required in high rise buildings when all the following conditions are met;*

a. *Area of refuge communication system terminal, installed and maintained per International Building Code Sec. 1007.6.3, is located immediately adjacent to each floor level landing.*

b. *The area of refuge communication terminal is connected to an approved constantly attended station.*

c. *The door between the stair and the vestibule (area of refuge) cannot be locked.*

An approved sign is provided at each floor level landing inside the stairwell.

Drop Bars & Security Devices

1030.2 Reliability. *Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied. Security devices, including drop bars, affecting means of egress shall require approval of the fire code official. . Doors utilizing drop bars must have signage on the exterior of the door stating "Door equipped with drop bar". Doors utilizing drop bars must have signage on the interior of the door stating "Drop bar must be removed when building is occupied". When security devices are not in use, they must be secured in a manner where unauthorized use is prevented, such as:*

a. *Locking bar in a keeper near the door*
b. *Securing bar in an office, locked closet, or similar location not accessible to the general public*

Approval to use security devices outside the scope of this code may be revoked for failure to meet the letter and intent of these rules.

Vehicle Fueling, Concerns From City Environmental

2205.1.3 Tank fill connections. *Delivery of flammable liquids to tanks ~~more than 1,000 gallons (3785 L) in capacity~~ shall be made by means of approved liquid- and vapor-tight connections between the delivery hose and tank fill pipe. Where tanks are equipped with any type of vapor recovery system, all connections required to be made for the safe and proper functioning of the particular vapor recovery process shall be made. Such connections shall be made liquid and vapor tight and remain connected throughout the unloading process. Vapors shall not be discharged at grade level during delivery.*

2205.2.1 Inspections. *Flammable and combustible liquid fuel dispensing and containment equipment shall be periodically inspected ~~where required by the fire code official~~ to verify that it is in proper working order and not subject to leakage.*

2205.3 Spill control. *Provisions shall be made to prevent liquids spilled during dispensing operations from flowing into buildings or off of the property on which the tank is located. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills, or other approved means.*

2206.7.6.2 Testing. *The automatic closing function of automatic closing fuel delivery hose nozzles that dispense Class I, II, and III liquids shall be tested an annual basis.*

Tents and Membrane Structures

2403.5 Use periods. *Temporary tents, air supported, air-inflated or tensioned membrane structures of any size that are independent of and separated by at least 20 feet (6096 mm) from any building as specified in Section 2403.8.2 shall not be erected for a period of more than 180 days within a 12-month period on a single premises. Temporary tents, air supported, air-inflated or tensioned membrane structures of any size that are in any way attached to or within 20 feet (6096 mm) of a building shall not be erected for a continuous period of more than 30 days or for a total of more than 90 days within a 12-month period on a single premises. Tents, air supported, air-inflated or tensioned membrane structures used for periods exceeding these limits shall be considered buildings or structures regulated by the Building Code and shall be required to be erected under a building permit and obtain a certificate of occupancy.*

2403.8.2 Location. *Tents or membrane structures shall not be located within 20 feet (6096 mm) of lot lines, buildings, other tents or membrane structures, parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary membrane structure, or tent.*

Tents and Membrane Structures

Exceptions:

1. Separation distance between membrane structures and tents not used for cooking, is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m2).

2. Membrane structures or tents need not be separated from buildings when all of the following conditions are met:

2.1. The aggregate floor area of the membrane structure or tent shall not exceed 10,000 square feet (929 m2).

2.2. The aggregate floor area and total height of the building and membrane structure or tent shall not exceed the allowable floor area or the allowable height, in stories or feet, including increases as indicated in the International Building Code.

2.3. Required means of egress are provided for both the building and the membrane structure or tent including travel distances.

2.4. Fire apparatus access roads are provided in accordance with Section 503.

2.5 Occupant load is, for the purposes of complying with Chapters 9 and 10 of the Building Code and Fire Code, based on the aggregate of the building floor area and the area under the membrane structure or tent.

Bulk Storage of Combustible and Flammable Liquids

3404.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited outside of a major industry (MI) district. ~~within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v)~~.

Bulk Storage of Combustible and Flammable Liquids

EXCEPTIONS:

1. The storage of up to 12,000 gallons *(45,425 L)* of Class I and II liquids within the limits defined as Light Industrial is allowable provided the tank is listed~~,~~ and labeled protected aboveground tank, and is installed in accordance *with Section 3404.2.9.7 and* its listing. The ~~*tank shall be constructed to provide a two hour fire resistance and the tank*~~ product shall be a noncorrosive, nonreactive liquid having a specific gravity equal to or less than 1.

2. The storage of up to 1,100 gallons *(4,164 L)* of Class I and II liquids at construction sites is allowed provided the tank is listed, labeled, and installed in accordance with its listing.

3. The placement of aboveground storage tanks at other locations or of greater capacity may be considered on a case-by-case basis provided zoning issues, secondary containment, and fire exposures are satisfactorily addressed including the identification of hazard ratings in compliance with Appendix ~~II~~ F. The placement of aboveground tanks ~~*containers*~~ of Class I and II liquids in aggregate quantities exceeding 12,000 gallons *(45,425 L)* water capacity, *where the nearest off-site exposure(s) is(are) less than 500 feet (152.4 m) from the tank(s),* may be permitted by the Chief only after *notification of owners/occupants of properties within 500 feet (152.4 m) requesting their input in order* ~~*a public hearing*~~ to assess the potential effect on the community. Notice *to adjacent property owners* ~~of the hearing must~~ *shall* be accomplished in accordance with the established procedures outlined in the Land Development Code for notice of applications and administrative actions or decisions.

UST Inventory Control

3404.2.11.5.1 Inventory control. *Daily inventory records shall be maintained for underground storage tank systems. Fill and withdrawal amounts shall be reconciled monthly.*

Bulk LPG Storage

3804.2 Maximum capacity within established limits. The storage of LP-gas in aggregate quantities greater than 2000 gallons (7571 L) water capacity is not permitted within the city. The storage of LP-gas in aboveground or below ground containers, greater than 24 gallons (91 L) water capacity and up to a maximum of 2000 gallons (7571 L) water capacity, is prohibited outside of Major Industry (MI) or Light Industry (LI) districts. Location of containers within a Light Industry zoning district may be approved by the Chief, subject to zoning and fire exposure concerns being satisfactorily addressed.

~~Within the limits established by law, restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page xiii).~~

Bulk LPG Storage

EXCEPTIONS:

1. The Chief may approve the placement of aboveground or below ground containers for single family residential, multi-family residential or commercial occupancies on a case-by-case basis, provided the container and appurtenances are listed and installed in accordance with that listing, and issues such as zoning and fire exposures are satisfactorily addressed. Guidance for evaluating locations for acceptability is published in the Fire Protection Criteria Manual.

2. *Where the nearest off-site exposure(s) is(are) less than 1,000 feet (304.8 m) from the tank(s),* the Chief may approve the placement of aboveground or below ground containers of LP-gas in aggregate quantities exceeding 2000 gallon water capacity only after ~~*a public hearing*~~ *notification of owners/occupants within 1,000 feet (304.8 m) of the tank(s)* to assess the potential effect on the community. Notice *to adjacent property owners and occupants* ~~*of the hearing*~~ shall be accomplished in accordance with the established procedures outlined in the Land Development Code for notice of applications and administrative actions or decisions, with the exception that notice shall be made to a distance of 1000 feet (304.8 m).

Smoke Alarms in Existing Residential Occupancies

4603.7.3 ~~907.3.2.3~~ Power source. In Group R occupancies, single-~~Single~~ station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. *Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system.* Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

~~***Exception:*** *Smoke alarms are permitted to be solely battery operated: in existing buildings where no construction is taking place; in buildings that are not served from a commercial power source; and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure.*~~

Manual Standpipes

4603.5 Standpipes. *Existing structures with occupied floors located more than 50 feet (15 240 mm) above or below the lowest level of fire department access shall be equipped with standpipes installed in accordance with Section 905. The standpipes shall have an approved fire department connection with hose connections at each floor level above or below the lowest level of fire department access. The fire ~~code official~~chief is authorized to approve the installation of manual standpipe systems to achieve compliance with this section where the system is demonstrated to be ~~the responding fire department is~~ capable of providing the required hose flow and pressure at the highest standpipe outlet while the fire department is providing the water supply to the fire department connection (FDC) at a maximum FDC inlet pressure of 150 psi (10.3 bar).*

Smoke Alarms in Existing Residential Occupancies

Exceptions:

1. *Smoke alarms are permitted to be solely battery operated in existing buildings in locations where smoke alarms were not required to be powered by the building wiring under the code in effect at the time of construction and where no construction is taking place.*
2. *Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.*
3. *Smoke alarms are permitted to be solely battery operated in existing areas of buildings where smoke alarms were not required to be powered by the building wiring under the code in effect at the time of construction and undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure~~, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes~~.*

Residential Fire Flow

B105.1 One- and two-family dwellings. *The minimum fire-flow requirements for detached one- and two-family dwellings having a fire-flow calculation area which does not exceed 3,600 square feet (344.5 m^2) and separated from adjacent homes and structures by at least 10 feet (3.05 m) shall be 1,000 gallons per minute (3785.4 L/min).*

B105.1.1 *The minimum fire-flow requirements one- and two-family dwellings, including townhomes, having a fire-flow calculation area which does not exceed 3,600 square feet (344.5 m^2) and separated from adjacent homes and structures by less than 10 feet (3.05 m) shall be 1,500 gallons per minute (3785.4 L/min).*

B105.1.2 *Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m^2) shall not be less than that specified in Table B105.1.*

Exception: *A reduction in required fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.*